

REMARKS

The above-identified patent application has been reviewed in light of the Examiner's Office Action dated March 10, 2006. Claims 1, 19, 26 and 38 have been amended without intending to abandon or to dedicate to the public any patentable subject matter. Therefore, Claims 1-42 are now pending. As set out more fully below, reconsideration and withdrawal of the rejections of the claims are respectfully requested.

Initially, Applicants would like to thank the Examiner for the courtesies extended during the telephone interview that was held on May 9, 2006, between the Examiner and the undersigned. During that telephone interview, the relationship between the pending claims and the cited references, U.S. Patent No. 6,260,120 to Blumenau ("Blumenau") and U.S. Patent No. 5,809,331 to Staats et al. ("Staats"), were discussed. In particular, the undersigned argued that the claimed invention allows a host device to distribute information identifying the host device to other devices as part of a host bus scan. It was further noted that the cited references do not disclose such an arrangement. Instead, the prior art is limited to a host bus scan in order to retrieve information regarding devices for the host. No agreement regarding allowable subject matter was reached.

Claims 1-42 stand rejected under 35 U.S.C. § 103 as being obvious over Blumenau in view of Staats. In order to establish a prima face case of obviousness under 35 U.S.C. § 103, there must be some suggestion or motivation to modify the reference or to combine the reference teachings, there must be a reasonable expectation of success, and the prior art reference or references must teach or suggest all of the claim limitations. (MPEP § 2143.) As discussed below, the cited references do not teach or suggest all of the claim limitations, whether those references are considered alone or in combination. In particular, the cited references do not teach, suggest or disclose using a host bus scan to distribute information identifying the host to other devices. Accordingly, the rejections under 35 U.S.C. § 103 should be reconsidered and withdrawn.

The present invention is generally directed to obtaining information by a storage controller in connection with the operation of a network storage system. More particularly, information related to the identity of a host that is provided as part of a host bus scan is captured by a storage controller, either directly or through a network switch. Accordingly, information regarding hosts can be collected by other devices without requiring the installation of network storage system specific software on the host.

The Blumenau reference is generally directed to storage mapping and partitioning among multiple host processors. More particularly, Blumenau discusses a storage controller for controlling access to data storage that has memory and at least one data port for a data network including host processors. (Blumenau, Abstract.) However, there is no discussion in Blumenau of a storage controller that obtains information identifying a host from a bus scan conducted by that host. That is, Blumenau does not discuss a system in which a storage controller or other device obtains information identifying a host performing a network scan initiated by the host from the network scan. Instead, Blumenau discusses using a graphical user interface associated with a storage system (Blumenau, col. 30, ll. 24-26) and entering an installation mode according to which each host controller port is queried by the installation facility of the storage system graphical user interface for its port worldwide name (WWN) (Blumenau, col. 36, ll. 41-57). Accordingly, Blumenau does not describe a system in which the WWN or other information related to a host is provided to a storage system controller through a bus scan performed by the host.

The Staats reference is generally directed to a system for retrieving configuration information from node configuration memory identified by key field. More particularly, Staats discusses scanning a bus in order to retrieve device specific identification information. (Staats, Abstract) However, there is no discussion in Staats of using a host bus scan to distribute information identifying the host. That is, a host bus scan is only used by Staats to retrieve information for the host regarding devices connected to the host via the bus.

With the above as background, it can be appreciated that the proposed combination of the Blumenau and Staats references does not describe at least the following italicized features of the independent claims: 1, 19, 26 and 38.

1. A method for facilitating use of a system that includes at least one host and at least one controller, comprising:
 - performing a host computer boot up of a first host;
 - as part of said boot up of said first host, said first host conducting a first host bus scan;
 - obtaining, by a first storage controller interconnected to said first host by a network, first information for identifying said first host comprising an identity of said at least one host from said first host bus scan, wherein said first host bus scan conducted by said first host includes transmitting said first information from said first host to said first storage controller, wherein said*

first storage controller is provided with said first information by said first host bus scan, and wherein at least a portion of said first information comprising said identity of said first host was not known to said first storage controller prior to said first host bus scan; and

using said first information by said first storage controller in facilitating use of the system by said first host, wherein said first information for identifying said first host is transmitted to first storage controller as part of said first bus scan is placed in a list of hosts having access to data storage through at least said first storage controller.

19. A method for facilitating use of a system that includes at least one host and at least one storage controller, comprising:

performing a bus scan by a first host;

registering said first host with a network switch, *wherein said registering includes storing information identifying said first host obtained by said switch from said first bus scan;*

accessing, by said first storage controller, said network switch communicating with said first host for obtaining, by said first storage controller, said first information for identifying said first host, wherein said first information for identifying said first host comprises a host identifier, and wherein said host identifier is first communicated to said first storage controller as a result of said accessing said network switch by said first storage controller; and

using said first information by said first storage controller in facilitating use of the system.

26. An apparatus for facilitating use of a system that includes at least one storage controller that is accessible by one or more hosts, comprising:

a storage controller that:

(a) includes a network interface for receiving network transmissions from each of the one or more hosts, said network transmissions including a first bus scan performed by a first host;

(b) *determines, for at least the first host of the one or more hosts, first host identifying information from said first scan performed by the first host; and*

(c) *sends first host identifying data indicative of said first host identifying information that was determined from said first bus scan to an administration subsystem, wherein said administrative subsystem is provided with said first host identifying data by said storage controller, and wherein said first host identifying data was not known or transmitted to said administration subsystem prior to said sending by said storage controller the first host identifying data indicative*

of said first host identifying information that was determined from said first bus scan performed by said first host to said administrative subsystem.

38. An apparatus for facilitating use of a system that includes at least one controller that is accessible by one or more hosts, comprising:

a storage controller that:

(a) includes a network interface for receiving network transmissions from each of the one or more hosts;

(b) accesses a network switch, via a transmission on a network, for obtaining first information for identifying at least a first host included in said one or more hosts, wherein said transmission is provided to the network by said network interface, and *wherein said first information for identifying the first host was supplied to said network switch by said first host while registering with said network switch during a bus scan*; and


(c) communicates with an administration subsystem related to said first information, wherein said storage controller transmits said first information identifying said first host to said administration subsystem.

Accordingly, because the proposed combination of references does not teach, suggest or disclose each and every element of the claims, the rejections of the claims as obvious should be reconsidered and withdrawn.

The application now appearing to be in form for allowance, early notification of same is respectfully requested. The Examiner is invited to contact the undersigned by telephone if doing so would expedite the resolution of this case.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: 

Bradley M. Knepper
Registration No. 44,189
1560 Broadway, Suite 1200
Denver, CO 80202-5141
(303) 863-9700

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